

### Estimator choice path 1:

Estimate  $S_{\text{true}}$  by a range of estimators

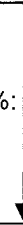
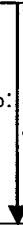
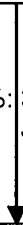
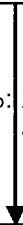


Calculate the estimated range of sample coverage



Choose the most accurate estimator for sample coverage (if highly uncertain, e.g., range > 50%, go to path 2)

0–26%: Jack5    26–38%: Jack4    38–50%: Jack3    50–74%: Jack2    74–96%: Jack1    >96%:  $S_{\text{obs}}$



Estimate species richness with the estimator chosen

### Estimator choice path 2:

Calculate community evenness



Choose the most appropriate estimator for the respective level of evenness

Low evenness:  
Jack2, Jack3  
or Jack4  
dependent  
on sampling  
intensity

High evenness:  
Jack1 or Jack2  
dependent on  
sampling  
intensity



Estimate species richness with the estimator chosen